

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 06/10/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,941	07/29/2003	Roger A. Fratti	12-19	9094
75	590 06/10/2005		EXAMINER	
Ryan, Mason & Lewis, LLP			MAGEE, THOMAS J	
1300 Post Road, Suite 205 Fairfield, CT 06824			ART UNIT	PAPER NUMBER
•			2811	

Please find below and/or attached an Office communication concerning this application or proceeding.

إر	4
(I	S
Y	_

Application No.	Applicant(s)
10/628,941	FRATTI ET AL.
Examiner	Art Unit
Thomas J. Magee	2811

**Advisory Action** Before the Filing of an Appeal Brief -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 25 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires 3 months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on \_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): \_\_\_ 6. Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7 🔀 For purposes of appeal, the proposed amendment(s): a) 🔲 will not be entered, or b) 🔲 will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: \_\_\_\_\_. Claim(s) rejected: 1-16. Claim(s) withdrawn from consideration: \_\_\_\_\_. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. X The request for reconsideration has been considered but does NOT place the application in condition for allowance because: (See attached sheet). 12. 
Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other: \_\_\_\_\_. Steven Loke Primary Examiner

## Item 11:

The Request for Reconsideration from Applicant has been carefully considered by Examiner, but it does not place the application in condition for allowance. In response to the contention that there is no purpose for the stress compensation layer, it is obvious that the layer is used to relieve stress, which is well known in the art to influence device performance. Indeed, as stated

in the claim, the purpose is to "counterbalance <u>at least a portion</u> of the overall residual stress of the <u>device</u>," and the oxide layer addresses the claim. Further, an anneal is done after deposition (Col. 2, lines 54 – 57).

Comments of Applicant (p.3, par. 1 and 2, Response) are not germane, since Hebert does indeed disclose a stress relief layer (Col. 1, lines 54 – 59), Zommer does disclose thinning of the substrate (Col. 2, lines 40 – 43). Additionally, the claim recites that "a portion of the overall residual stress is [counterbalanced]." Hence, the combined references read on the claim. The motivation for combining the references is, as stated in the Office Action, to improve resistance and breakdown voltage.

In regard to comments on Sherman (p. 3, par. 3, Response) (pp. 5 - 6, Response) Applicant is correct in noting that Sherman was omitted in the caption, but was recovered in the caption for Claims 9 - 12.

However, assertions of patentability based on the independent claims discussed above, is not warranted..

With regard to repeated applications of thinning and application of a stress compensation layer (pp. 3 – 4, Response) references for independent claim 1 (Hebert, Zommer, and

Savastiouk et al.) are relevant and Svastiouk et al. disclose (p. 3, par. 1, line 3) that curvature is produced in the process of thinning, therefore repeated applications of the process will produce curvature.

With regard to commentary regarding the lack of motivation for combining references (p.4, para. 1-2), Examiner does not agree. The desirability of altering resistivity and threshold voltage is indeed a valid rationale. The example provided by Paul et al. is equally valid and acceptable. Other comments are not germane.

With regard to comments by Examiner in the Response to Arguments section of the last Office Action, the recitation in the preamble to the claim (p. 5, para. 1-3) still is not accorded any patentable weight. The assertion that the preamble provides antecedent basis for Claim 9 is not valid, since no antecedent is called for in Claim 9, and the curvature is a consequence of applying the layer.

With regard to commentary of Applicant (p. 5, para. 4) relating thicknesses of components and resultant stress (as would be predicted by Wilson et al.) Applicant is correct in stating that there are particular thicknesses wherein no curvature would be observed. However, this is not germane to the topic here, since the claims and the references assume there are thicknesses where curvature will occur.

With regard to commentary on the applicability of Wilson et al. in maintaining and controlling the curvature of a device, Examiner disagrees. As stated in the Office Action, Wilson et al. dis-

close the equations and the metrology for measuring curvature. This clearly provides a means for controlling and maintaining curvature using the metrology disclosed therein. It then has everything to do with the control and maintenance of device curvature.

Based on the above, the rejection is herewith maintained.